

SAFETY AND HEALTH CONTROL CHARTS SUMMARY

PHMC - Recordable and Lost/Restricted Case Rates have remained stable since October 1996. The Severity Rate significantly reduced over the past six months in comparison to the increases that occurred from April 1997 through October 1997.

Pacific Northwest National Laboratory (Pacific Northwest/PNNL) - Recordable and Lost/Restricted Case Rates have been stable for more than two years. There is a new improvement in the Severity Rate noted, with the past seven months in a row below average. There was a significant spike in the First Aid Case Rate for April. However, nine of the eleven first aid cases reported were the result of one minor event, which did not involve any reported symptoms and no treatment was necessary.

Bechtel Hanford Inc. (ERC) - Recordable and Lost/Restricted Case Rates have been stable for more than two years. The Severity Rate has been stable since August 1996.

SIGNIFICANT SAFETY AND HEALTH EVENTS

- **Hanford Severity Rate:** Following a significant increase in the overall Severity Rate (lost or restricted work days per 200,000 hours) for April 1997 through October 1997, the rate has significantly decreased for November 1997 through March 1998.
- **PHMC Severity Rate:** There was an increase in the number of restricted workdays on cases in April, May, June, and October 1997, followed by a decrease beginning November 1997. Causes for the increase in restricted days and the recovery include:
 1. In April through June 1997, FDNW contractor cases had 498 restricted days. Since July 1997, FDNW cases have only had 56 restricted days. April through June 1997 saw an increase in construction work following a severe winter which curtailed many construction activities. Over the summer of 1997, corporate leadership focused attention on FDNW with the objective of occupational injury and illness reduction. Concurrently, FDNW is working on their VPP application. Trend graphs of FDNW have demonstrated significant reductions in injury and severity rates since July 1997.
 2. Spent Nuclear Fuels had 281 restricted days and 63 lost away days attributed to cases occurring in April, May, and October 1997. Of these, the Canister Storage Building (CSB) work contributed 189 restricted days and 63 lost days. Fiscal Year 1998 has been better, however SNF still contributed 230 restricted days of a total of 1021 lost and restricted days for cases occurring through May 1, 1998. FDH-OSH is working with Project Direction to encourage DESH to take appropriate action. The CSB project has been winding down since October 1997, but there is still construction work to be performed at Spent Nuclear Fuels which will be closely monitored.

Improvement actions being taken include the actions with DESH, and an initiative to focus on the five occupations which are the leading sources of OSHA recordable injuries. The injuries of primary concern are back injuries due to overexertion and body motion awkward position. At the April Presidents' Zero Accident Council (PZAC), action plans were briefed by the contractors and plans are in progress.

- **Pacific Northwest/PNNL Severity Rate:** The PNNL Severity Rate has remained well below the established average for a period of seven months. Accordingly, the average and control limits will be adjusted. All labor hours for April 1998 have not yet been recorded due to fiscal month financial processing schedules. Therefore, the revisions will be incorporated into the chart next month, after the remaining labor hours for April become available.
- **PHMC First Aid Case Rate:** The significant decrease in First Aid Case Rate noted last month did not remain valid as several first aid cases were entered late. This matter of timely reporting is being addressed with the PHMC contractors through FDH Project Direction.
- **Pacific Northwest/PNNL First Aid Case Rate:** The PNNL First Aid Case Incident Rate for April was significantly high. However, nine of the eleven first aid cases reported were the result of precautionary evaluations performed on personnel who were in the vicinity of a small chemical spill in the Environmental and Molecular Sciences Laboratory on April 16, 1998. None of the staff members involved reported any symptoms and no treatment was provided.
- **PHMC Radiological Protection:** The number of Skin and Clothing Contaminations per 10 workers with >0 Exposure shows a significant increasing trend with 7 months in a row above average. The increase in rate is primarily caused by a decrease in the number of workers with greater than zero exposure. This number has decreased from 992 to 790 to 516 over the past three quarters. The raw number of personal contaminations has remained statistically stable as has the number of radiological area Access Control Entry System (ACES) entries. The cumulative PHMC dose received has decreased while the number of contaminations and ACES entries have remained stable.

A significant increase occurred in the number of Biological Transfer or Legacy Contamination Events in April 1998. This increase is due to an increased focus on tumbleweed mitigation and management of PHMC outdoor sites. It is probable that this indicator will again increase next quarter.

Note 1: Control charts used in this report indicate whether program data is stable (i.e., within 3 standard deviations of the average) or unstable (i.e., outside 3 standard deviations of the average) and if a negative or positive trend exists. Stable program data does not mean a program is satisfactory. Statistically significant determinations use Deming Statistical Process Control criteria.

Note 2: The control charts submitted in this report fulfill the reporting requirements of Letter, J. D. Wagoner, RL, to President, FDH, "Contract No. DE-AC06-96RL13200 - Reporting of Safety Statistics to RL," dated November 4, 1996; Letter, S. A. Sieracki, RL, to J. F. Nemec, ERC, "Reporting of Safety Statistics to RL," CCN038876, dated October 21, 1996; and Letter, QSH-96-048, dated November 4, 1996, from John D. Wagoner, Manager, U.S. Department of Energy, Richland Operations Office to Dr. W. J. Madia, Director, Pacific Northwest National Laboratory, Subject: "Reporting of Safety Statistics to RL".

Note 3: The goal for each control chart contained in this section is to demonstrate statistically significant performance for the project or program being controlled as determined by Deming Statistical Process Control criteria. Improvement criteria includes single points below the Lower Control Limit (LCL) or seven consecutive points of better than average performance. Degradation criteria includes single points above the Upper Control Limit (UCL) or seven consecutive points of worse than average performance. Twenty-five points without significant improvement or degradation indicates stable or "flat" performance.